

Title (en)  
BRUSH HEAD ARRANGEMENTS

Title (de)  
BÜRSTENKOPFANORDNUNGEN

Title (fr)  
AGENCEMENTS DE TÊTE DE BROSSÉ

Publication  
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Application  
**EP 15715849 A 20150324**

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- IB 2015052145 W 20150324

Abstract (en)  
[origin: WO2015145340A1] A brush head assembly (100) including: a hard platen (24); a plurality of bristle tufts (21), each of which includes a plurality of bristle strands having a proximal end (23) and a free end (25); and an elastomeric matrix (30) bonded to the hard platen, where each of the bristle tufts is bonded directly to the elastomeric matrix without a retention element. A brush head assembly (100) includes: a hard platen (24) with a plurality of bristle tuft holes (28); a plurality of bristle tufts (21), each of which includes a plurality of bristle strands having a proximal end (23) and a free end (25), where each of the plurality of bristle tufts are inserted into a respective one of the bristle tuft holes; and an elastomeric matrix (30) that at least partially encompasses the hard platen and the proximal end of the bristle tufts.

IPC 8 full level  
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Citation (examination)

- DE 1457055 B1 19700924 - WESSEL WALTER JUN
- WO 03017801 A1 20030306 - KAO CORP [JP], et al
- DE 459657 C 19280509 - WILHELM STOLLBERG
- JP 2002345560 A 20021203 - KAO CORP

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**WO 2015145340 A1 20151001**; BR 112016021812 A2 20170815; CN 106132240 A 20161116; CN 106132240 B 20190903; CN 106132241 A 20161116; CN 106132241 B 20190628; CN 106132242 A 20161116; CN 106132242 B 20190528; CN 106413470 A 20170215; CN 106413470 B 20190913; EP 3122206 A1 20170201; EP 3122206 B1 20200527; EP 3122207 A1 20170201; EP 3122207 B1 20231213; EP 3122207 C0 20231213; EP 3122208 A1 20170201; EP 3122208 B1 20240207; EP 3122208 C0 20240207; EP 3122209 A1 20170201; EP 3122209 B1 20240313; EP 3122209 C0 20240313; EP 3682761 A1 20200722; JP 2017508536 A 20170330; JP 2017508542 A 20170330; JP 2017508544 A 20170330; JP 2017512567 A 20170525; JP 6574193 B2 20190911; JP 6662786 B2 20200311; JP 6669666 B2 20200318; PL 3122208 T3 20240527; PL 3122209 T3 20240701; RU 2016141574 A 20180425; RU 2016141574 A3 20180918; RU 2684507 C2 20190409; US 10258443 B2 20190416; US 10477959 B2 20191119; US 10568411 B2 20200225; US 10575626 B2 20200303; US 2017086572 A1 20170330; US 2017095321 A1 20170406; US 2017095322 A1 20170406; US 2017105824 A1 20170420; US 2019192267 A1 20190627; WO 2015145342 A1 20151001; WO 2015145350 A1 20151001; WO 2015145352 A1 20151001

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**IB 2015052131 W 20150324**; BR 112016021812 A 20150324; CN 201580015744 A 20150324; CN 201580016100 A 20150324; CN 201580016507 A 20150324; CN 201580016539 A 20150324; EP 15715847 A 20150324; EP 15715848 A 20150324; EP 15715849 A 20150324; EP 15715851 A 20150324; EP 20154526 A 20150324; IB 2015052134 W 20150324; IB 2015052145 W 20150324; IB 2015052149 W 20150324; JP 2016557913 A 20150324; JP 2016558177 A 20150324; JP 2016558206 A 20150324; JP 2016558208 A 20150324; PL 15715849 T 20150324; PL 15715851 T 20150324; RU 2016141574 A 20150324; US 201515127897 A 20150324; US 201515127913 A 20150324; US 201515127926 A 20150324; US 201515127948 A 20150324; US 201916290263 A 20190301